CLAIM AMENDMENTS

Claims 1-244 (cancelled)

245. (previously presented) A construct which when present in a cell produces a product, said construct having at least one terminus comprising a polynucleotide tail hybridized to a complementary polynucleotide sequence and an antibody bound to said hybridized polynucleotide sequence, said construct being bound non-ionically to an entity comprising a chemical modification or a ligand.

246. (original) The construct of claim 245 wherein said antibody comprises a polyclonal or monoclonal antibody.

247. (currently amended) A composition comprising:

(a) a non-natural entity which comprises:

at least one domain to a specific nucleic acid component[[;]] and

at least one domain to a cell of interest; and

(b) said specific nucleic acid component; wherein the domain or domains to said nucleic acid component are different from the domain or domains to said cell.

248. (original) The composition of claim 247, wherein said entity comprises a binder.

249. (original) The composition of claim 248, wherein said binder and said domain are the same.

250. (original) The composition of claim 248, wherein said binder and said domain are different.

251. (original) The composition of claim 248, wherein said binder is selected from a polymer, a matrix, a support, or a combination of any of the foregoing.

252. (previously presented) The composition of claim 247, wherein said nucleic acid component is selected from the group consisting of a nucleic acid, a nucleic acid construct, a nucleic acid conjugate, a virus, a viral fragment, a viral vector, a viroid, a phage, a plasmid, a plasmid vector, a bacterial fragment and a combination of the foregoing.

253. (original) The composition of claim 247, wherein said cell is prokaryotic or eukaryotic.

254. (original) The composition of claim 247, wherein said domains are attached covalently or noncovalently, or through a binder, or a combination thereof.

255. (original) The composition of claim 254, wherein said noncovalent binding is selected from ionic interactions and hydrophobic interactions, or a combination thereof.

Claim 256 (cancelled)

257. (currently amended) The composition of claim ~~303~~255, wherein said specific binding is mediated by a ligand binding receptor.

258. (previously presented) The composition of claim 257, wherein said ligand binding receptor is selected from the group consisting of a polynucleotide sequence to be recognized by its complementary sequence, an antigen to be recognized by its corresponding monoclonal or polyclonal antibody, an antibody to be recognized by its corresponding antigen, a lectin to be recognized by its corresponding sugar, a hormone to be recognized by its receptor, a receptor to be recognized by its hormone, an inhibitor to be recognized by its enzyme, an enzyme to be recognized by its inhibitor, a cofactor to be recognized by its cofactor enzyme binding site, a cofactor enzyme binding site to be recognized by its cofactor, a binding ligand to be recognized by its substrate, and a combination of the foregoing.

259. (currently amended) The composition of claim ~~248~~247, wherein the domain to said nucleic acid component and the domain to said cell of interest are natural, and said binder is attached to said nucleic acid component by means other than a natural binding site.

260. (original) The composition of claim 259, wherein said binder comprises modified fibronectin or modified polylysine, or both.

261. (original) The composition of claim 247, wherein said cell of interest is contained within an organism.

262. (original) The composition of claim 247, further comprising said cell of interest.

263. (currently amended) A method of introducing a nucleic acid component into a cell comprising:

(a) providing the composition of claim 247[[;]] and

(b) administering said composition.

264. (original) The method of claim 263, wherein administering is carried out in vivo.

265. (original) The method of claim 263, wherein administering is carried out ex vivo.

266. (original) A kit for introducing a nucleic acid component into a cell of interest, comprising in packaged containers or combination:

(a) a non-natural entity which comprises at least one domain to said nucleic acid component, and a domain to said cell of interest;

(b) a nucleic acid component, optionally with

(c)buffers and instructions.

267. (currently amended) A composition comprising:

an entity which comprises at least one domain to a cell of interest and a binder[[,]]

wherein said domain or domains are attached to a nucleic acid component which is in non-double stranded form and wherein the binder and domain are the same.

268. (currently amended) The composition of claim 267, wherein said entity comprises ~~a binder~~comprises more than one domain.

Claims 269-271(cancelled)

272. (previously presented) The composition of claim 267, wherein said cell is prokaryotic, or eukaryotic.

273. (previously presented) The composition of claim 267, wherein said nucleic acid component is selected from the group consisting of a nucleic acid, a nucleic acid construct, a nucleic acid conjugate, a virus, a viral fragment , a viral vector, a viroid, a phage, a plasmid, a plasmid vector, a bacterial fragment and a combination of the foregoing.

274. (currently amended) The composition of claim ~~267~~268, wherein said domains ~~is selected from the group consisting of~~ are attached via covalent bonding, noncovalent binding, and a combination thereof.

275. (previously presented) The composition of claim 274, wherein said noncovalent binding is selected from the group consisting of ionic interactions, hydrophobic interactions, and a combination thereof.

276. (currently amended) The composition of claim ~~267~~268, wherein said domains are attached noncovalently through specific binding.

277. (previously presented) The composition of claim 276, wherein said specific binding is mediated by a ligand binding receptor.

278. (previously presented) The composition of claim 277, wherein said ligand binding receptor is selected from the group consisting of a polynucleotide sequence to be recognized by its corresponding monoclonal, or polyclonal, antibody, an antibody to be recognized by its corresponding antigen, a lectin to be recognized by its corresponding sugar, a hormone to be recognized by its receptor, a receptor to be recognized by its hormone, an inhibitor to be recognized by its enzyme , an enzyme to be recognized by its inhibitor, a cofactor to be recognized by its cofactor enzyme binding site, a cofactor to be recognized by its cofactor enzyme binding site, a cofactor enzyme binding site to be recognized by its cofactor, a binding ligand to be recognized by its substrate, and a combination of the foregoing.

279. (original)The composition of claim 267, wherein said cell of interest is contained within an organism.

280. (original) The composition of claim 267, further comprising said cell of interest.

281. (currently amended) A method of introducing a nucleic acid component into a cell comprising:

(a) providing the composition of claim 267[[;]] and

(b) administering said composition.

282. (original) The method of claim 281, wherein administering is carried out in vivo.

283. (original) The method of claim 281, wherein administering is carried out ex vivo.

284. (currently amended) A kit for introducing a nucleic acid component into a cell of interest, comprising in packaged containers or combinations:

(a) an entity which comprises a domain to said cell of interest, wherein said domain is attached to a nucleic acid component which is in non-double stranded form; and a binding, wherein said binder and said domain are the same

optionally with

(b) buffers and instructions.

285. (currently amended) A composition comprising:

an entity which comprises a domain to a nucleic acid component and a binder, wherein said binder and said domain are the same,

wherein said domain is attached to a cell of interest.

286. (currently amended) The composition of claim 285, wherein said entity comprises ~~a binder~~more than one domain.

Claims 287-289 (cancelled)

290. (currently amended) The composition of claim ~~286~~285, wherein said nucleic acid component is selected from the group consisting of a nucleic acid, a nucleic acid construct, a nucleic acid conjugate , a virus, a viral fragment, a viral vector, a viroid, a phage, a plasmid, a plasmid vector, and a bacterial fragment, and a combination of the foregoing.

291. (original) The composition of claim 285, wherein said cell is eukaryotic or prokaryotic.

292. (currently amended) The composition of claim ~~285~~286, wherein said domains ~~is selected from the group consisting of~~are attached to each other via covalent bonding, noncovalent binding, and a combination thereof.

293. (previously presented) The composition of claim 292, wherein said noncovalent binding is selected from the group consisting of ionic interactions, hydrophobic interactions, and a combination thereof.

294. (original) The composition of claim 292, wherein said noncovalent binding comprises a specific complex.

295. (original) The composition of claim 294, wherein said specific complex is mediated by a ligand binding receptor.

296. (previously presented) The composition of claim 295, wherein said ligand binding receptor is selected from the group consisting of a polynucleotide sequence to be recognized by its complementary sequence, an antigen to be recognized by its corresponding monoclonal, or polyclonal, antibody, an antibody to be recognized by its corresponding antigen, a lectin to be recognized by its corresponding sugar, a hormone to be recognized by its receptor, a receptor to be recognized by its hormone, an inhibitor to be recognized by its enzyme, an enzyme to be recognized by its inhibitor, a cofactor to be recognized by its cofactor enzyme binding site, a cofactor to be recognized by its cofactor enzyme binding site, a cofactor enzyme binding site to be recognized by its cofactor, a binding ligand to be recognized by its substrate, and a combination of the foregoing.

297. (original) The composition of claim 285, further comprising said cell of interest.

298. (original) The composition of claim 285, wherein said cell of interest is contained within an organism.

299. (currently amended) A method of introducing a nucleic acid component into a cell comprising:

(a) providing the composition of claim 285[[;]] and

(b) administering said composition.

300. (original)The method of claim 299, wherein administering is carried out *in vivo*.

301. (original) The method of claim 299, wherein administering is carried out *ex vivo*.

302. (currently amended) A kit for introducing a nucleic acid component into a cell of interest, comprising in packaged containers or combination:

(a) an entity which comprises a domain to said nucleic acid component, wherein said domain is attached to said cell of interest and said entity comprises a binder, wherein said binder and said domain are the same, optionally with

(b) buffers and instructions.

303. (previously presented) The composition of claim 247, wherein said domains are attached noncovalently through specific binding.

304. (new) A method of introducing a nucleic acid component into a cell comprising:

(a) providing a composition comprising an entity which comprises at least one domain to a cell of interest, wherein said domain or domains are attached to a nucleic acid component which is in non-double stranded form and

(b) administering said composition in vivo or ex vivo.

305. (new) A method of introducing a nucleic acid component into cells from an organism ex vivo comprising:

(a) obtaining cells of interest from said organisms;

(b) providing a composition comprising an entity which comprises at least one domain to a nucleic acid component;

(c) administering the composition of (b) into cells from an organism such that said composition is bound to said cells and

(d) readministering said cells back into said organism.